

AMENDMENTS TO THE CLAIMS:

1. (currently amended): A heat pump apparatus comprising:

a compressor for compressing a refrigerant;

a circulation duct having an air inlet and an air outlet at respective ends thereof
for circulating drying air ~~therein~~ therethrough in a direction from the air inlet to the air
outlet;

a radiator, disposed inside said circulation duct and immediately adjacent to the
air outlet, for condensing the refrigerant to heat the drying air;

an evaporator, disposed inside said circulation duct and immediately adjacent to
the air inlet, for evaporating the refrigerant to absorb heat from the drying air;

a first throttle apparatus and a second throttle apparatus for controlling the
refrigerant pressure;

a heat exchanger, disposed inside said circulation duct and connected between
said first throttle apparatus and said second throttle apparatus, functioning as another
radiator for condensing the refrigerant to heat the drying air or as another evaporator
for evaporating the refrigerant to absorb heat from the drying air, depending on the
refrigerant pressure controlled by said first throttle apparatus and said second throttle
apparatus; [[and]]

a drying room, connected to said circulation duct thus constituting a circulatory
path for the drying air, for offering a space to place a subject to be dried; and

a refrigerant pipe connecting, in the following order, said compressor; said radiator; said first throttle apparatus; said heat exchanger; said second throttle apparatus; and said evaporator, in a series circuit of the refrigerant.

2. (canceled)

3. (previously presented): The heat pump apparatus according to claim 1, further comprising a discharge-pressure detector for detecting discharge pressure of said compressor, and a throttle-apparatus controller for controlling said first throttle apparatus and said second throttle apparatus depending on the discharge pressure detected by said discharge-pressure detector.

4. (previously presented): The heat pump apparatus according to claim 1, further comprising a discharge-temperature detector for detecting discharge temperature of said compressor, and a throttle-apparatus controller for controlling said first throttle apparatus and said second throttle apparatus depending on the discharge temperature detected by said discharge-temperature detector.

5. (previously presented): The heat pump apparatus according to claim 1, further comprising an air-temperature detector for detecting inlet air temperature of said evaporator, and a throttle-apparatus controller for controlling said first throttle

apparatus and said second throttle apparatus depending on the inlet air temperature detected by said air-temperature detector.

6. (canceled)

7. (previously presented): The heat pump apparatus according to claim 1, wherein the refrigerant is carbon dioxide.

8. (previously presented): The heat pump apparatus according to claim 1, wherein said heat exchanger functions

as another radiator when the refrigerant pressure controlled by said first throttle apparatus and said second throttle apparatus is equal to or higher than a certain value and

as another evaporator when the refrigerant pressure controlled by said first throttle apparatus and said second throttle apparatus is lower than the certain value.

9. (canceled)